AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning on page 8, line 28, as follows:

Referring now to the figures of the drawing, the figures constitute a part of this

specification and illustrate exemplary embodiments [[to]] of the invention. It is to be understood

that in some instances various aspects of the invention may be shown exaggerated or enlarged to

facilitate an understanding of the invention.

Please amend the paragraph beginning on page 11, line 17, as follows:

The rate of heat release in the engine, needed to avoid knock and undesirable noise, can

be controlled by the establishment of substantial temperature gradients in the cylinder. The use

of the reformate can generate temperature and/or composition gradients by not-ideal premixing

of the air and the plasmatron reformate. By establishing non-uniform distribution of the

reformate in the cylinder it is possible to generate conditions that enhanced enhance ignition and

control[[,]]rate of heat release, knock and noise. Since the initial temperature of the reformate is

substantially higher than that of EGR, either higher temperature gradients with the same flow of

gas, or equal temperature for smaller flow rates of reformate than EGR, can be established.

Page 2 of 13

USSN: 10/715,933 Atty Docket: 0492611-0529